What is claimed is:

1. A method for treating cancer in a mammal, said method comprising:

administering to a tumor site of the mammal an anticancer composition comprising a mixture of an anticancer agent and a calcium phosphate paste, said paste comprised of one or more nanocrystalline or poorly crystalline calcium phosphates and a physiologically acceptable fluid, the paste having an injectable or formable consistency at the time of administration and hardenable at the tumor site.

2. The method of claim 1, wherein each calcium phosphate having a Ca/P ratio of less than or equal to 1.7.

3. The method of claim 1, wherein the anticancer agent is selected from the group consisting of methotrexate, cis-platin, prednisone, hydroxyprogesterone, medrioxyprogesterone acetate, megestrol acetate, diethylstilbestrol, testosterone propionate, fluoxymesterone, vinblastine, vincristine, vindesine, daunorubicin, doxorubicin, hydroxyurea, procarbazine, aminoglutethimide, mechlorethamine, cyclophosphamide, mephalan, uracil mustard, chlorambucil, busulfan, carmustine, lomusline, dacarbazine (DTIC, dimethyltriazenomideazolecarboxamide), fluorouracil, 5-fluorouracil, cytarabine, cytosine arabinoxide, mercaptopurine, 6-mercaptomurine, tamoxifan, paclitaxel, etopiside, vinorelbine, gemcitabine, leuprolide, flutamide, goseralin acetate, and thioguanine, and mixtures thereof.

4. The method of claim 1, wherein the anticancer composition is administered to the tumor site by cannula or by injection.

5. The method of claim 4, wherein the anticancer composition is administrable by cannula or injection more than five minutes after its preparation.

6. The method of claim 5, wherein the anticancer composition is administrable by cannula or injection more than twenty minutes after its preparation.

7. The method of claim 1, wherein the paste hardens into an apatitic calcium phosphate.

8. The method of claim 1, wherein the nanocrystalline or poorly crystalline calcium phosphate paste comprises a calcium phosphate selected from the group consisting of poorly crystalline apatitic (PCA) calcium phosphates (PCA), dicalcium phosphates, such as dicalcium phosphate dihydrate (DCPD) and dicalcium phosphate anhydrous (DCPA), tricalcium phosphates (TCP), monetite, monocalcium phosphate monohydrate (MCPM), hetpacalcium phosphate, calcium pyrophosphate, calcium metaphosphate, octacalcium phosphates (OCP), hydroxyapatites (HA).

9. The method of claim 8, wherein at least one of the nanocrystalline or poorly crystalline calcium phosphates is a poorly crystalline apatitic calcium phosphate.

10. The method of claim 1, wherein each of the said one or more nanocrystalline or poorly crystalline calcium phosphates has a calcium to

phosphate ratio in the range of 1.0 to 1.67.

11. The method of claim 1 wherein each of the said one or more nanocrystalline or poorly crystalline calcium phosphates has a calcium to phosphate ratio in the range of 1.3 to 1.67.

12. The method of claim 1 wherein the nanocrystalline or poorly crystalline calcium phosphate paste has an overall calcium to phosphate ratio in the range of 1.0 to 1.7.

13. The method of claim 1, wherein the nanocrystalline or poorly crystalline calcium phosphate paste has an overall calcium to phosphate ratio in the range of 1.40 to 1.65.

14. The method of claim 1, wherein the nanocrystalline or poorly crystalline calcium phosphate paste comprises a physiologically acceptable fluid in an amount sufficient to produce a paste having injectable or formable consistency.

15. The method of claim 1, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than one week.

16. The method of claim 1, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than two week.

17. The method of claim 1, wherein a therapeutically effect amount of

anticancer agent is released from the composition for a time greater than one month.

18. The method of claim 1, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than three months.

19. The method of claim 1, wherein delivery of the anticancer therapy to the tumor site is sufficient to prevent increase of tumor mass without significant weight loss of the mammal.

20. The method of claim 1, wherein delivery of the anticancer therapy to the tumor site is sufficient to result in a decrease in tumor mass without significant weight loss in the mammal.

21. The method of claim 1, wherein the particle size of the nanocrystalline or poorly crystalline calcium phosphate is selected to provide a desired release kinetic of the anticancer drug.

22. An anticancer composition comprising a mixture of a physiologically effective amount of an anticancer agent and a calcium phosphate paste, said paste comprised of one or more nanocrystalline or poorly crystalline calcium phosphate and a physiologically acceptable fluid, the paste having an injectable or formable consistency at the time of administration and hardenable at the tumor site.

23. The composition of claim 22, wherein each calcium phosphate having a Ca/P ratio of less than or equal to 1.7.

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24. The composition of claim 22, wherein the anticancer agent is selected from the group consisting of methotrexate, cis-platin, prednisone, hydroxyprogesterone, medrioxyprogesterone acetate, megestrol acetate, diethylstilbestrol, testosterone propionate, fluoxymesterone, vinblastine, vincristine, vindesine, daunorubicin, doxorubicin, hydroxyurea, procarbazine, aminoglutethimide, mechlorethamine, cyclophosphamide, mephalan, uracil mustard, chlorambucil, busulfan, carmustine, lomusline, dacarbazine (DTIC, dimethyltriazenomideazolecarboxamide), fluorouracil, 5-fluorouracil, cytarabine, cytosine arabinoxide, mercaptopurine, 6-mercaptomurine, tamoxifan, paclitaxel, etopiside, vinorelbine, gemcitabine, leuprolide, flutamide, goseralin acetate, and thioguanine, and mixtures thereof.

25. The composition of claim 22, wherein the anticancer composition is of a consistency administrable to the tumor site by cannula or by injection.

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26. The composition of claim 22, wherein the nanocrystalline or poorly crystalline calcium phosphate cement comprises a calcium phosphate selected from the group consisting of amorphous calcium phosphate, poorly crystalline apatitic (PCA) calcium phosphates (PCA), dicalcium phosphates, such as dicalcium phosphate dihydrate (DCPD) and dicalcium phosphate anhydrous (DCPA), tricalcium phosphates (TCP), monetite, monocalcium phosphate monohydrate (MCPM), hetpacalcium phosphate, calcium pyrophosphate, calcium

SUB A2 metaphosphate, octacalcium phosphates (OCP), hydroxyapatites (HA).

27. The composition of claim 26, wherein at least one of the nanocrystalline or poorly crystalline calcium phosphates is selected from the group consisting of amorphous calcium phosphate and poorly crystalline apatitic calcium phosphate.

28. The composition of claim 22, wherein each of the said one or more nanocrystalline or poorly crystalline calcium phosphates has a calcium to phosphate ratio in the range of 1.3 to 1.67.

29. The composition of claim 22, wherein the nanocrystalline or poorly crystalline calcium phosphate paste has an overall calcium to phosphate ratio in the range of 1.0 to 1.7.

30. The composition of claim 22, wherein the nanocrystalline or poorly crystalline calcium phosphate paste has an overall calcium to phosphate ratio in the range of 1.0 to 1.67.

31. The composition of claim 22, wherein the nanocrystalline or poorly crystalline calcium phosphate paste has an overall calcium to phosphate ratio in the range of 1.40 to 1.65.

32. The composition of claim 22, wherein nanocrystalline or poorly crystalline calcium phosphate paste comprises a physiologically acceptable fluid in

an amount sufficient to produce a paste having injectable or formable consistency for at least five minutes.

33. The composition of claim 22, wherein nanocrystalline or poorly crystalline calcium phosphate paste comprises a physiologically acceptable fluid in an amount sufficient to produce a paste having injectable or formable consistency for at least twenty minutes.

34. The composition of claim 22, wherein the nanocrystalline or poorly crystalline calcium phosphate paste is hardenable into an apatitic calcium phosphate.

35. The composition of claim 22, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than one week.

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36. The composition of claim 22, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than two week.

37. The composition of claim 22, wherein a therapeutically effect amount of anticancer agent is released from the composition for a time greater than one month.

38. The composition of claim 22, wherein a therapeutically effect

amount of anticancer agent is released from the composition for a time greater than three months.

39. The composition of claim 22, wherein delivery of the anticancer therapy to the tumor site is sufficient to at least prevent increase of tumor mass without significant weight loss of the mammal.

40. The composition of claim 22, wherein delivery of the anticancer therapy to the tumor site is sufficient to prevent a decrease in tumor mass without significant weight loss in the mammal.

41. The composition of claim 22, wherein the particle size of the calcium phosphate is selected to provide a desired release kinetic of the anticancer drug.

42. A kit for use in preparing a flowable anticancer composition that remain injectable for at least about 20 minutes, said kit comprising:

dry ingredients comprising a nanocrystalline or poorly crystalline calcium phosphate and a second calcium phosphate in a proportion of about 1:10 to 10:1 by weight;

a physiologically acceptable aqueous lubricant in an amount sufficient to produce a flowable product upon combination with said dry ingredients; and

an anticancer agent in an amount ranging from about 0.01 to 10 wt. % of said dry ingredients.

43. The kit of claim 42, further comprising a means of mixing the dry ingredients and the lubricant.

44. The kit of claim 42, further comprising injecting means.